

limited operating clock frequency of up to 50 MHz. However, when the USB module is in operation this may be reduced to 48 MHz.

[0059] After the controller starts execution from the internal ROM, the controller is responsible for startup and coordinates the operation of the audio device **401** through the execution of controller firmware. The Scan mode **603b** and Test mode **604b** are used to scan and test the audio device **401**. In one embodiment, neither the Scan mode **603b** nor the Test mode **604b** should be selected during normal usage.

[0060] Next, the audio device **401** is initialized **604a**. The audio device **401** automatically configures itself with standard functions. After the audio device **401** is initialized, it disconnects **605a** the Host South Bridge IDE bus **406** from the host chip set. In one embodiment, the audio device **401** is connected between the Host South Bridge IDE **406** and the CD-ROM or CD-RW IDE **407**. During normal PC operation the audio device **401** is in transparent mode **601b** and the computer (e.g. notebook) accesses a storage location (e.g. CD-RW **403**) as if the audio device **401** does not exist. After disconnecting **605a** the IDE bus from the host chip set the audio device **401** accesses **606a** a disk drive **403** on the IDE bus **407** directly. In alternate embodiments, the audio device **401** accesses a hard drive **411**. In other alternate embodiments, the audio device **401** accesses a SmartMedia **412**.

[0061] In addition to establishing a connection to the disk drive **403** via the IDE bus **407**, the audio device **401** also disconnects **607a** the ACLINK **409** from the host's South Bridge **402**. After disconnecting the ACLINK **409** from the South